

ABSTRACT OF THE DISCLOSURE

The invention provides a weight detecting apparatus, which can eliminate an influence by vibration disturbance exerted from a device installation side and an object placing side, and thereby can improve detection precision. The weight detecting apparatus includes a weight detecting load cell (31) having a
5 fixed end (31a) fixed to a fixed base (13) arranged on a floor and a free end (31b) bearing a weight of an object (X), a first vibration detecting load cell (32) arranged on the fixed end (31a) side of the weight detecting load cell (31) for detecting a vibration component on the fixed end (31a) side, i.e., a floor vibration component,
10 and a second vibration detecting load cell (33) arranged on the free end (31b) side of the weight detecting load cell (31) for detecting a motor vibration component on the free end (31b) side, i.e., the motor vibration component. The weight detecting apparatus precisely detects the weight of the object (X) by removing the vibration component from the detection signal of the weight detecting load cell (31) based on
15 the detection signals of the respective load cells (31 - 33).